# TA-KMSW500

# **SERVICE MANUAL**

Ver. 1.3 2009.11

E Model Australian Model Canadian Model



TA-KMSW500 is the amplifier section in HT-DDW5500/DDW7500/DDW8500.

#### **SPECIFICATIONS**

#### • Power amplifier (TA-KMSW500)

RMS output (6 ohms, 80 Hz, THD 10%)

200 W per channel <sup>1)</sup> 185 W per channel <sup>2)</sup>

Input LINE IN (input pin jacks)

1) Measured under the following conditions:

Area code	Power requirements
E51, SP, SAF, MY	240 V AC, 50 Hz
EA	127 V AC, 60 Hz
AR, AUS, TH	230 V AC, 50 Hz
CND	120 V AC, 60 Hz

<sup>&</sup>lt;sup>2)</sup>Measured under the following conditions:

Area code	Power requirements
AR, TH	220 V AC, 50 Hz

Design and specifications are subject to change without notice.

#### Abbreviation

AR : Argentina model AUS : Australian model EA : Saudi Arabia model

E51 : Chilean and Peruvian models
MY : Malaysia model

MY : Malaysia model SAF : South African model SP : Singapore model CND : Canadian model TH : Thai model

**POWER AMPLIFIER** 



#### Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

#### **UNLEADED SOLDER**

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.

(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

#### : LEAD FREE MARK

Unleaded solder has the following characteristics.

• Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.

Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.

Soldering irons using a temperature regulator should be set to about 350 °C.

Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!

Strong viscosity

Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.

Usable with ordinary solder
 It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

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#### SAFETY-RELATED COMPONENT WARNING!

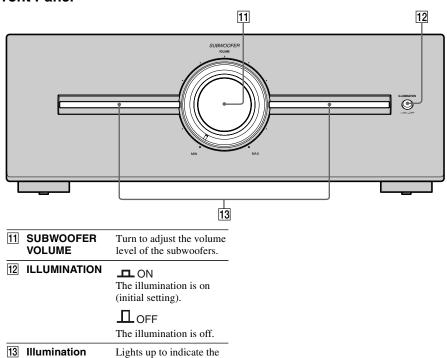
COMPONENTS IDENTIFIED BY MARK  $\triangle$  OR DOTTED LINE WITH MARK  $\triangle$  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

# SECTION 1 GENERAL

This section is extracted from instruction manual.

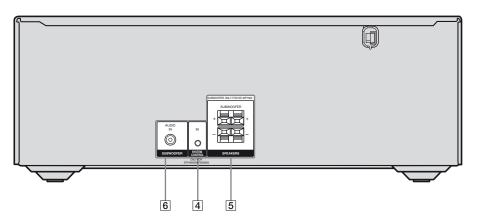
#### LOCATION OF CONTROLS

#### **Front Panel**



#### **Rear Panel**

indicator



### 4 SYSTEM CONTROL INPUT/OUTPUT section



SYSTEM CONTROL OUT jack Connects to the power amplifier (page 18).

subwoofer output level.



SYSTEM Connects to the CONTROL IN receiver (page 18). jack

#### **5 SPEAKERS section**

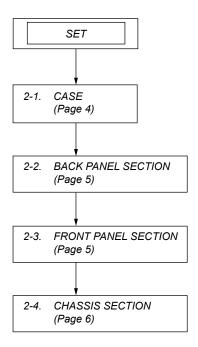
+ -	Connects to the supplied speakers (page 16).

#### 6 AUDIO INPUT/OUTPUT section

Black AUDIO IN Connects to the receiver.	
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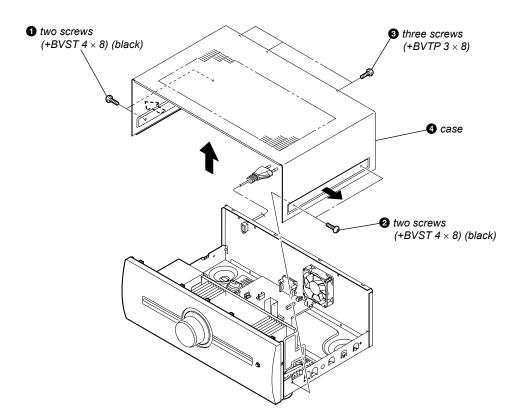
#### SECTION 2 DISASSEMBLY

**Note:** This set can be disassemble according to the following sequence.

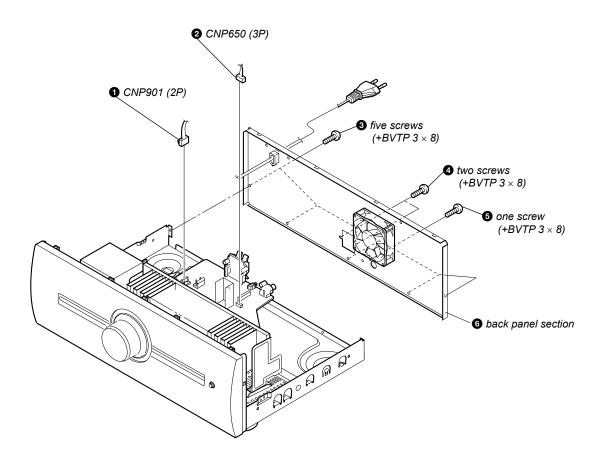


**Note:** Follow the disassembly procedure in the numerical order given.

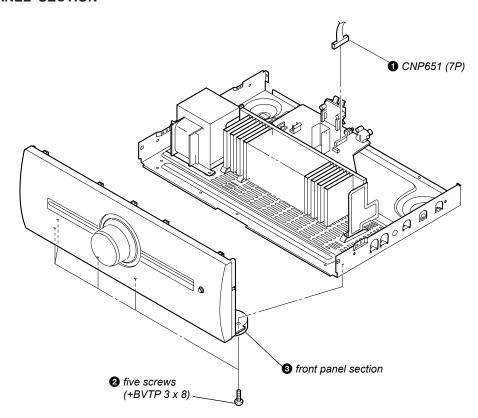
#### 2-1. CASE



#### 2-2. BACK PANEL SECTION

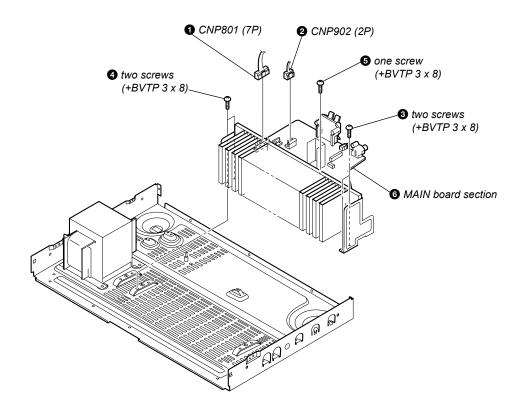


#### 2-3. FRONT PANEL SECTION



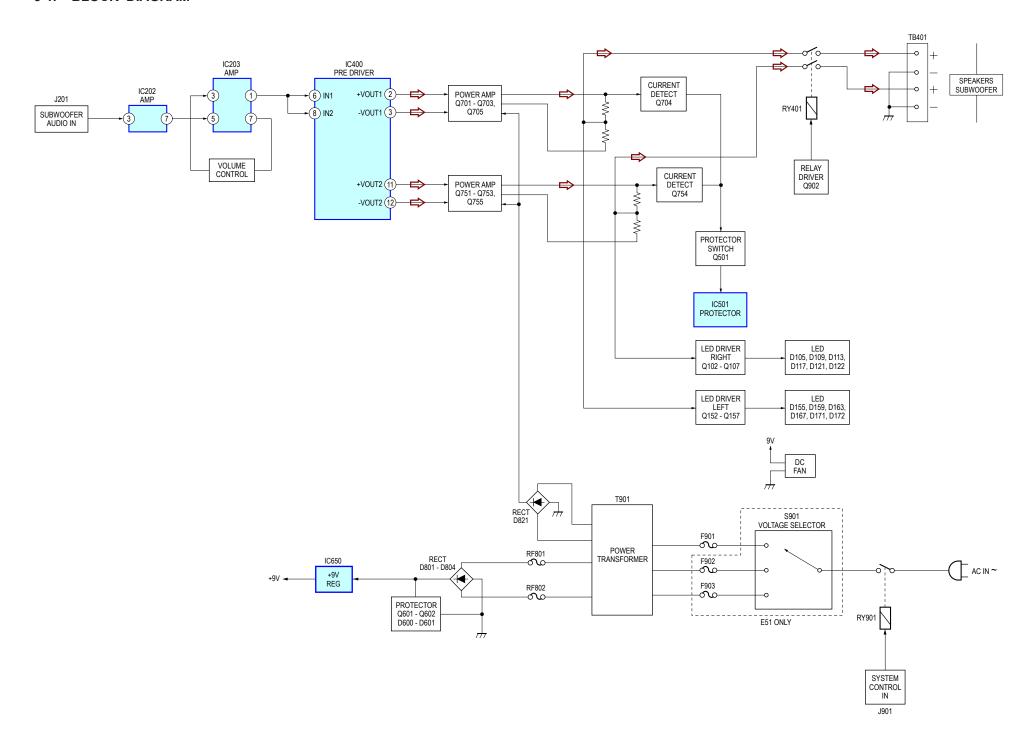
#### TA-KMSW500

#### 2-4. MAIN BOARD SECTION



#### SECTION 3 DIAGRAMS

#### 3-1. BLOCK DIAGRAM



Signal path

: AUDIO (ANALOG)

 R-ch is omitted due to same as L-ch.

#### THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS. (In addition to this, the necessary note is printed in each block.)

#### For Printed Wiring Boards.

#### Note:

• • — : Parts extracted from the component side.

•  $\triangle$  : internal component.

Pattern from the side which enables seeing.

#### Caution:

Parts on the parts face side seen from Parts face side: (SIDE A) the parts face are indicated. Pattern face side: Parts on the pattern face side seen from (SIDE B) the pattern face are indicated.

Abbreviation

E51 : Chilean and Peruvian models

: Saudi Arabia model

#### For Schematic Diagrams.

- All capacitors are in µF unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $^{1\!/4}$  W or less unless otherwise specified.

• - : nonflammable resistor. • fusible resistor.

panel designation.

#### Note:

The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety. Replace only with part

Note: Les composants identifiés par une marque \land sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

- : B+ Line.
- === : B- Line.

number specified.

· Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.

no mark: FM

- Voltages are taken with VOM (Input impedance 10  $M\Omega$ ). Voltage variations may be noted due to normal production tolerances.
- · Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- · Circled numbers refer to waveforms.
- · Signal path.

: TUNER (FM/AM) : VIDEO (AUDIO) : VIDEO

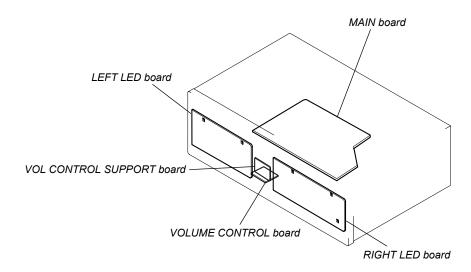
□ DVD (DIGITAL)
□ CD (ANALOG)

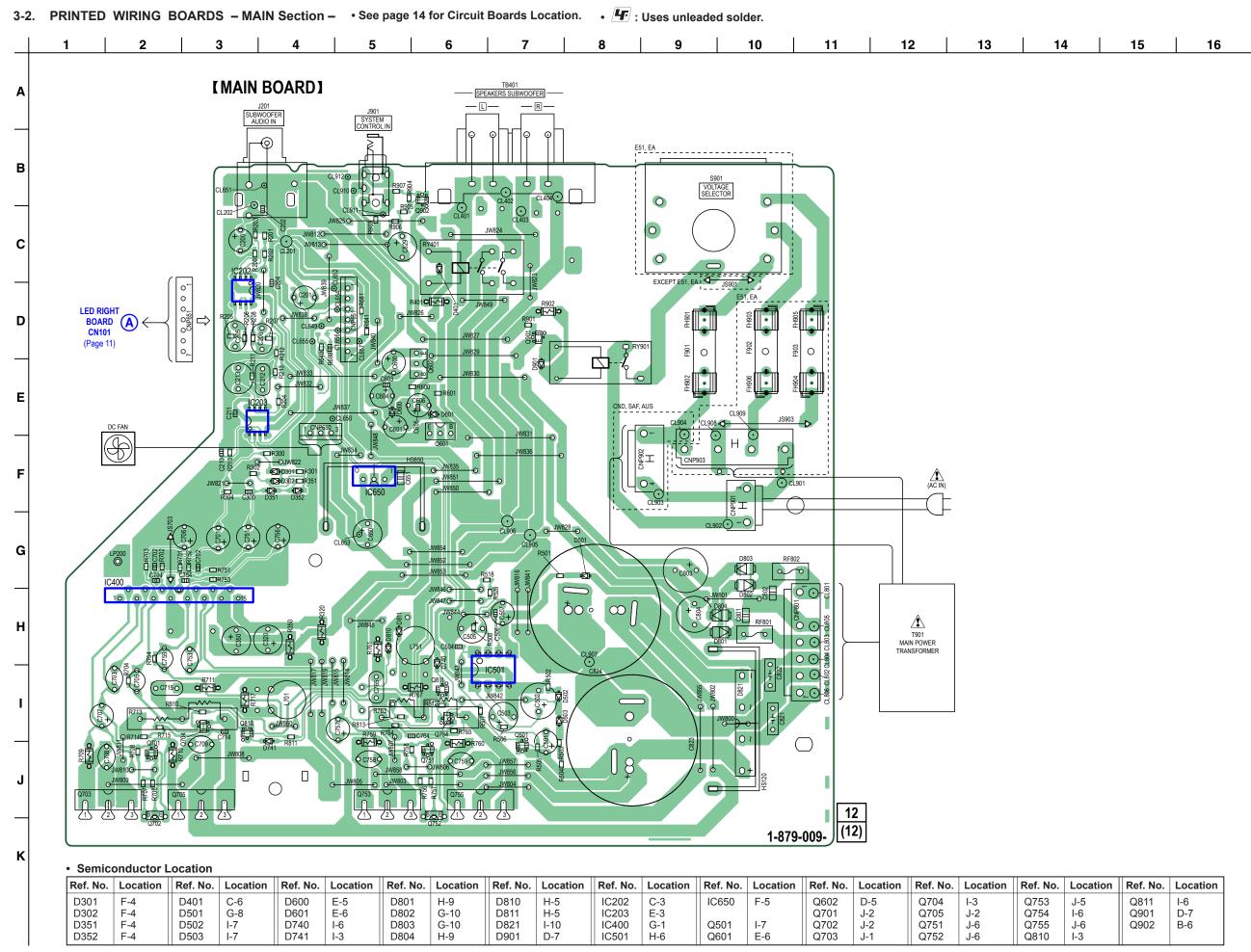
Abbreviation

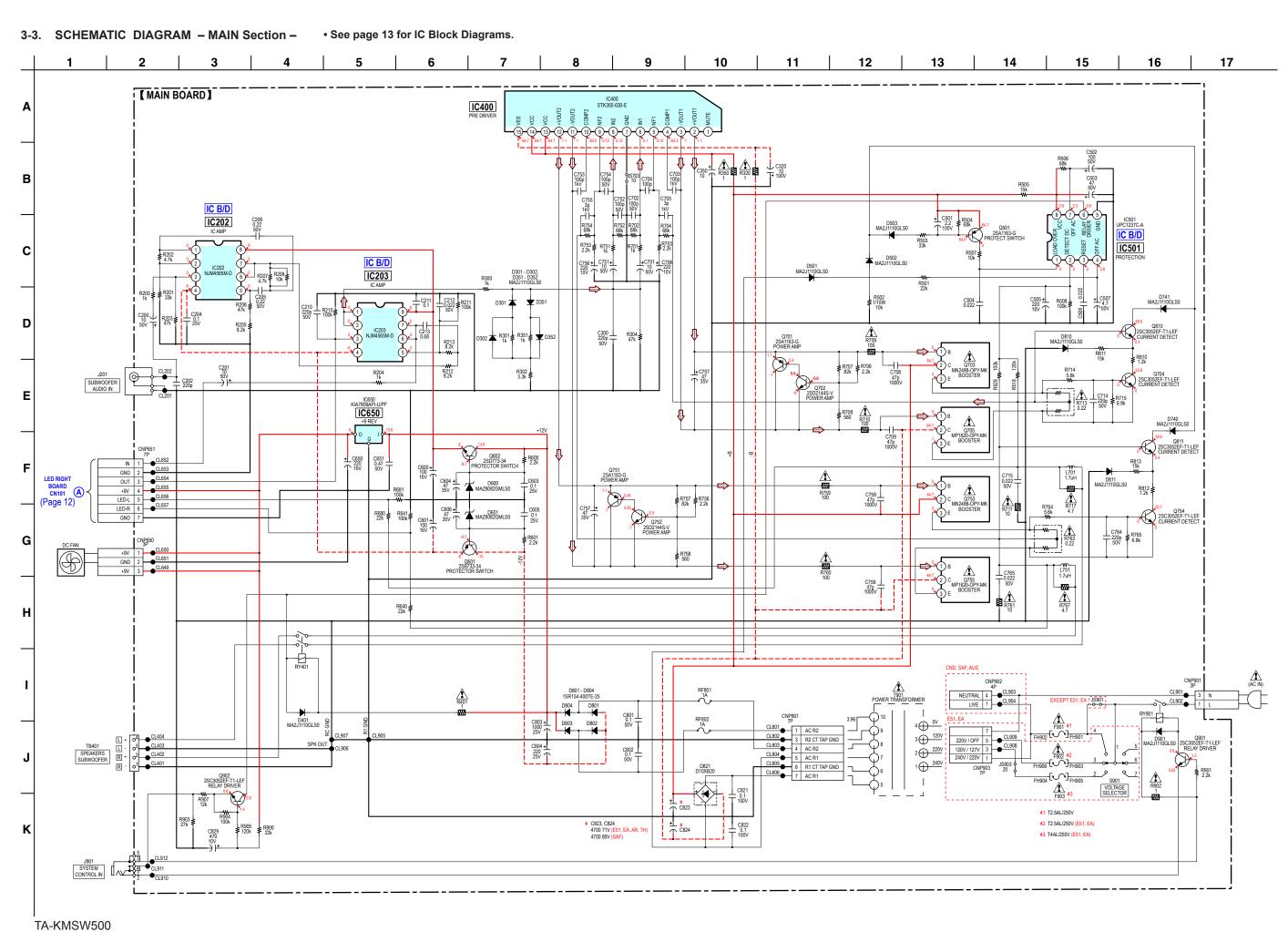
E51 : Chilean and Peruvian models

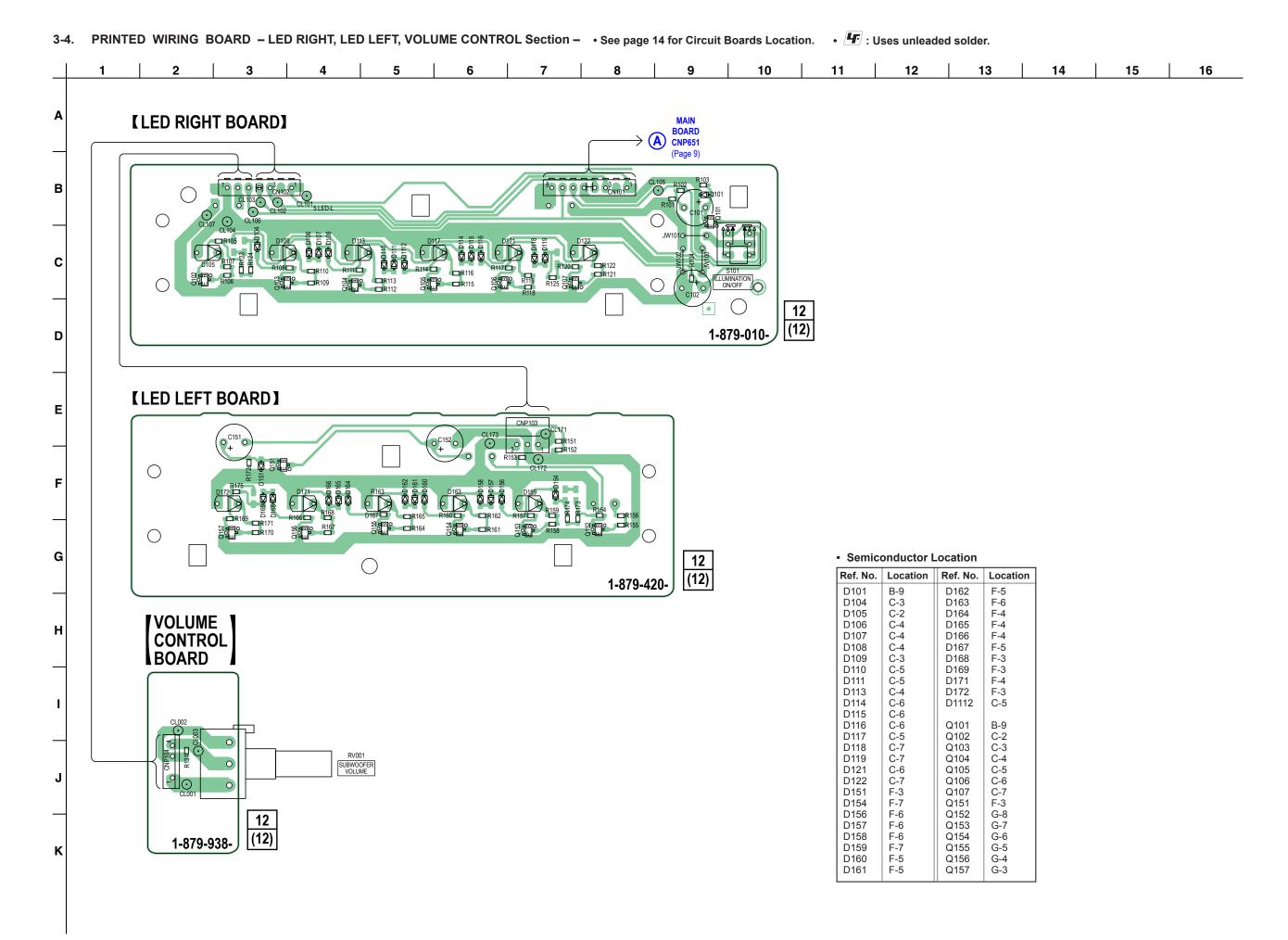
: Saudi Arabia model

#### Circuit Boards Location

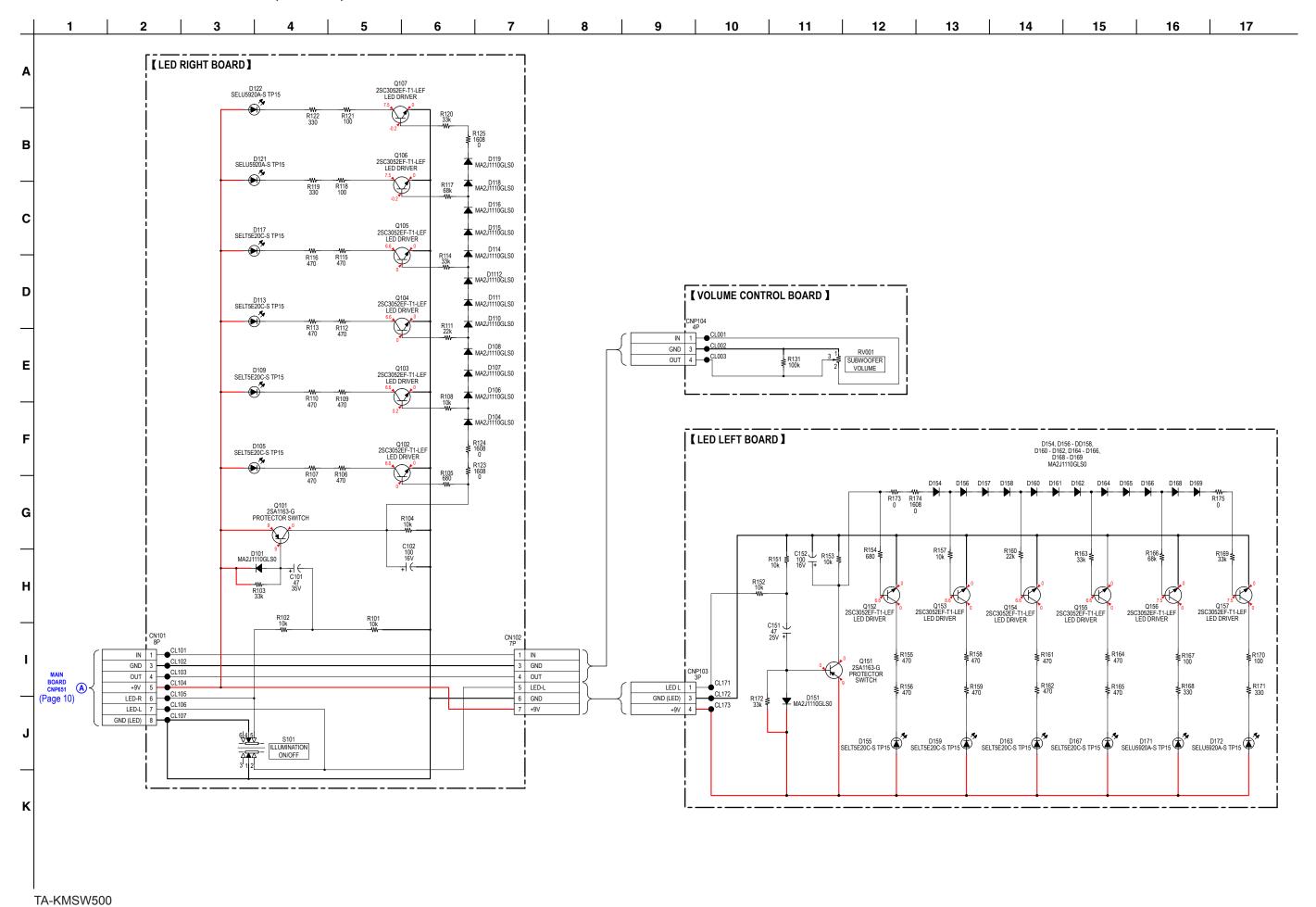




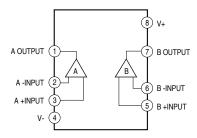




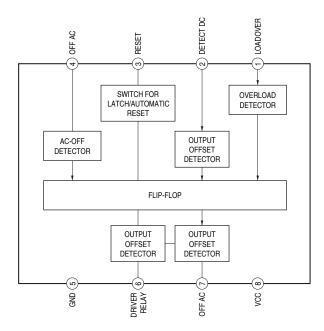
#### 3-5. SCHEMATIC DIAGRAM - LED RIGHT, LED LEFT, VOLUME CONTROL Section -



#### • IC Block Diagrams IC202, IC203 NJM4565M-D (MAIN BOARD)



#### IC501 uPC1237C-A (MAIN BOARD)



### SECTION 4 EXPLODED VIEWS

#### Note:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts Example: KNOB, BALANCE (WHITE) . . . (RED)

Parts Color Cabinet's Color

· Abbreviation

AR : Argentina model MY : Malaysia model AUS : Australian model SAF : South African EA : Saudi Arabia model

A : Saudi Arabia model SP : Singapore model

E51 : Chilean and Peruvian models

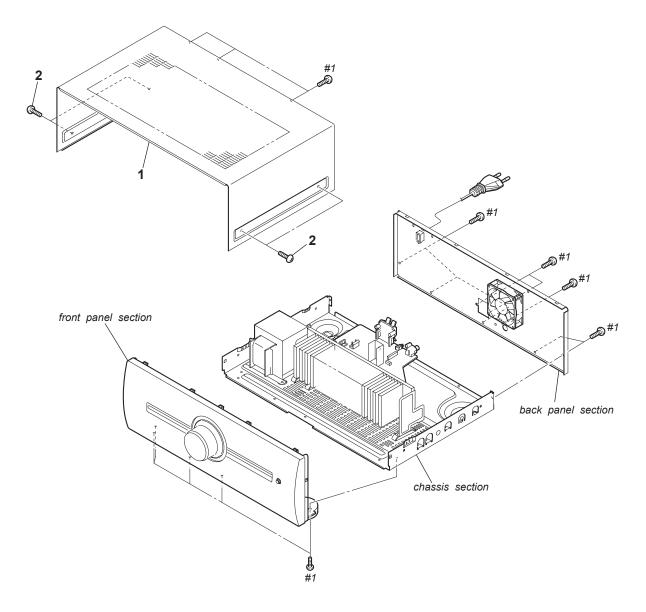
 Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

 The mechanical parts with no reference number in the exploded views are not supplied.

 Accessories are given in the last of the electrical parts list. The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety.

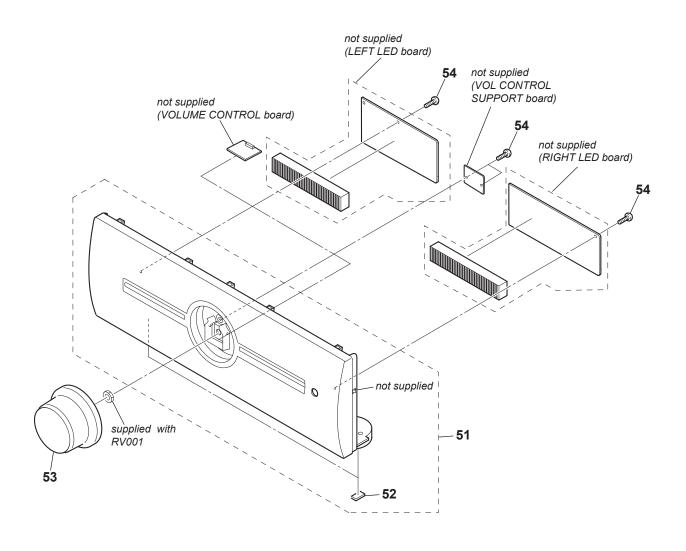
Replace only with part number specified.

#### 4-1. CASE



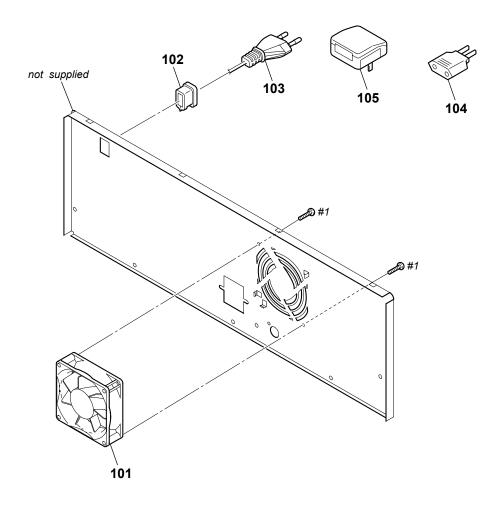
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1 2	3-285-693-51 2-580-630-01	CASE SCREW, +BVST 4X8		#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	

#### 4-2. FRONT PANEL SECTION



Ref. No.	Part No.	<u>Description</u>	Remark	Ref. No.	Part No.	Description	Remark
51 52	X-2342-687-1 4-977-358-01	FRONT PANEL ASSY CUSHION		53 54	4-127-221-01 3-087-053-01	KNOB, VOLUME +BVTP2.6 (3CR)	

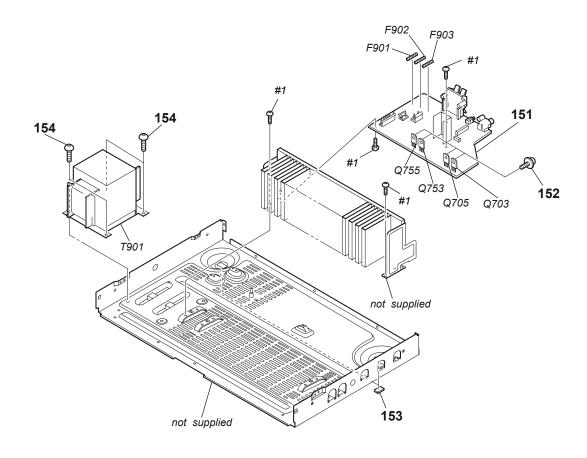
#### 4-3. BACK PANEL SECTION



The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101 102 102 <u>↑</u> 103 <u>↑</u> 103	1-763-738-11 3-703-244-00 4-996-267-12 1-777-071-83 1-829-387-11	DC FAN CORD BUSH (2104) (EXCEPT TH) BUSHING (FBS 001), CORD (TH) CORD, POWER (EXCEPT AR, TH) CORD, POWER (AR)		<ul><li>⚠ 103</li><li>⚠ 103</li><li>⚠ 103</li><li>⚠ 104</li><li>⚠ 105</li></ul>	1-833-566-21 1-834-270-11 1-834-288-21 1-569-008-33 1-770-019-71	POWER SUPPLY CORD (AUS) CORD, POWER (CND) CORD, POWER (TH) ADAPTOR, CONVERSION 2P (E51) ADAPTOR, CONVERSION PLUG 3P (E	A)
				#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	

#### 4-4. CHASSIS SECTION



The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	A-1653-231-A	MAIN BOARD, COMPLETE (EXCEPT E	51, EA)	<b>⚠</b> Q703	6-702-390-01	TRANSISTOR MN2488-OPY-MK	
151	A-1660-457-A	MAIN BOARD, COMPLETE (E51)		⚠ Q705	6-702-391-01	TRANSISTOR MP1620-OPY-MK	
151	A-1660-457-A	MAIN BOARD, COMPLETE (EA)		<b>⚠</b> Q753	6-702-390-01	TRANSISTOR MN2488-OPY-MK	
152	3-905-609-01	SCREW (TRANSISTOR)		<u></u> <b>∆</b> Q755	6-702-391-01	TRANSISTOR MP1620-OPY-MK	
153	4-977-358-01	CUSHION		<u></u> 1901	1-445-698-12	POWER TRANSFORMER (SAF, AUS)	
154	4-249-675-01	+BV SUMITITE S 4X6 ROUND		<u></u> 1901	1-445-713-12	TRANSFORMER, POWER (E51)	
▲ F901	1-532-464-33	FUSE (T2.5AL/250V) (EXCEPT CND)		<b>⚠</b> T901	1-445-731-11	POWER TRANSFORMER (CND)	
▲ F901	1-533-452-12	FUSE, GLASS TUBE (DIA. 5) (CND)		<u></u> ₹ Т901	1-445-751-11	TRANSFORMER, POWER (EA)	
<b> №</b> F902	1-532-464-33	FUSE (T2.5AL/250V) (E51, EA)		#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
<b> №</b> F903	1-532-504-33	FUSE (T4AL/250V) (E51, EA)					

LEFT LED MAIN

# SECTION 5 ELECTRICAL PARTS LIST

#### Note:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "\*" are not stocked since they are seldom required for routine service

Some delay should be anticipated when ordering these items.

- CAPACITORS
- uF: μF
- COILS uH: µH

RESISTORS

All resistors are in ohms. METAL: Metal-film resistor.

METAL OXIDE: Metal oxide-film resistor.

F: nonflammable
• SEMICONDUCTORS

In each case, u:  $\mu$ , for example:

uA. . : μA. . , uPA. . , μPA. . , uPB. . : μPB. . , uPC. . , μPC. . ,

uPD. . : μPD. .

Abbreviation

AR : Argentina model AUS : Australian model EA : Saudi Arabia model

E51 : Chilean and Peruvian models

MY: Malaysia model SAF: South African model SP: Singapore model

When indicating parts by reference number, please include the board name.

The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety

Replace only with part number specified.

Ref. No.	Part No.	<u>Description</u>			Remark	Ref. No.	Part No.	Description			Remark
		LEFT LED BOAF				R155	1-216-817-11	METAL CHIP	470	5%	1/10W
						R156	1-216-817-11	METAL CHIP	470	5%	1/10W
		< CAPACITOR >	>			R157	1-216-833-11	METAL CHIP	10K	5%	1/10W
						R158	1-216-817-11	METAL CHIP	470	5%	1/10W
C151	1-119-772-11	ELECT	47uF	20%	35V	R159	1-216-817-11	METAL CHIP	470	5%	1/10W
C152	1-119-774-11	ELECT	100uF	20%	16V	R160	1-216-837-11	METAL CHIP	22K	5%	1/10W
0102	1 110 774 11	LLLOI	Toour	2070	10 V	11100	1210 007 11	WEINE OIT	ZZIV	0 70	1710
		< CONNECTOR	>			R161	1-216-817-11	METAL CHIP	470	5%	1/10W
						R162	1-216-817-11	METAL CHIP	470	5%	1/10W
* CNP103	1-564-518-11	PLUG, CONNEC	CTOR 3P			R163	1-216-839-11	METAL CHIP	33K	5%	1/10W
						R164	1-216-817-11	METAL CHIP	470	5%	1/10W
		< DIODE >				R165	1-216-817-11	METAL CHIP	470	5%	1/10W
D151	6-501-817-01	DIODE MA2J1	110GLS0			R166	1-216-843-11	METAL CHIP	68K	5%	1/10W
D154	6-501-817-01	DIODE MA2J11	110GLS0			R167	1-216-809-11	METAL CHIP	100	5%	1/10W
D155	6-502-781-01	DI SELT5E20C	-S TP15			R168	1-216-815-11	METAL CHIP	330	5%	1/10W
D156	6-501-817-01	DIODE MA2J11	110GLS0			R169	1-216-839-11	METAL CHIP	33K	5%	1/10W
D157	6-501-817-01	DIODE MA2J11	110GLS0			R170	1-216-809-11	METAL CHIP	100	5%	1/10W
D158	6-501-817-01	DIODE MA2J11	110GLS0			R171	1-216-815-11	METAL CHIP	330	5%	1/10W
D159	6-502-781-01	DI SELT5E20C	-S TP15			R172	1-216-839-11	METAL CHIP	33K	5%	1/10W
D160	6-501-817-01	DIODE MA2J11	110GLS0			R173	1-216-864-11	SHORT CHIP	0		
D161	6-501-817-01	DIODE MA2J1	110GLS0			R174	1-216-864-11	SHORT CHIP	0		
D162	6-501-817-01	DIODE MA2J1	110GLS0			R175	1-216-864-11	SHORT CHIP	0		
						******	******	*****	******	*****	*****
D163	6-502-781-01	DI SELT5E20C	-S TP15								
D164	6-501-817-01	DIODE MA2J11	110GLS0				A-1653-231-A	MAIN BOARD, C	OMPLETE	(EXCE	PT E51, EA)
D165	6-501-817-01	DIODE MA2J11	110GLS0				A-1660-457-A	MAIN BOARD, C	OMPLETE		(E51, EA)
D166	6-501-817-01	DIODE MA2J11	110GLS0				A-1735-189-A	MAIN BOARD, C		(CND, A	US, AR, TH)
D167	6-502-781-01	DI SELT5E20C	-S TP15					*********	******		
D168	6-501-817-01	DIODE MA2J11	110GLS0				7-685-646-79	SCREW +BVTP 3	3X8 TYPE2 I	T-3	
D169	6-501-817-01	DIODE MA2J1	110GLS0								
D171	6-502-782-01	DI SELU5920A	-S TP15					< CAPACITOR >			
D172	6-502-782-01	DI SELU5920A	-S TP15								
						C200	1-126-964-11	ELECT	10uF	20%	50V
		< TRANSISTOR	>			C201	1-126-964-11	ELECT	10uF	20%	50V
						C202	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
Q151	8-729-216-31	TRANSISTOR	2SA1163	8-G		C204	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V
Q152	8-729-620-07	TRANSISTOR	2SC3052	EF-T1-LEF		C205	1-137-190-91	FILM	0.22uF	5%	50V
Q153	8-729-620-07	TRANSISTOR		EF-T1-LEF							
Q154	8-729-620-07	TRANSISTOR		EF-T1-LEF		C206	1-137-190-91	FILM	0.22uF	5%	50V
Q155	8-729-620-07	TRANSISTOR		EF-T1-LEF		C210	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
Q100	0 120 020 01	110 1101010101	2000002			C211	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V
Q156	8-729-620-07	TRANSISTOR	2SC3052	EF-T1-LEF		C212	1-136-157-00	FILM	0.022uF	5%	50V
Q157	8-729-620-07	TRANSISTOR		EF-T1-LEF		C213	1-136-175-00	FILM	0.68uF	5%	50V
Q IJI	0-123-020-01	MOTOR	2000002	LLI - I I-LL'F		0213	1-100-170-00	ı ILIVI	v.ooui	J /0	JUV
		< RESISTOR >				C300	1-162-957-11	CERAMIC CHIP	220PF	5%	50V
						C320	1-128-582-11	ELECT	10uF	20%	100V
R151	1-216-833-11	METAL CHIP	10K	5%	1/10W	C350	1-128-582-11	ELECT	10uF	20%	100V
R152	1-216-833-11	METAL CHIP	10K	5%	1/10W	C501	1-128-579-11	ELECT	2.2uF	20%	100V
R153	1-216-833-11	METAL CHIP	10K	5%	1/10W	C502	1-126-968-11	ELECT	100uF	20%	50V
R154	1-216-819-11	METAL CHIP	680	5%	1/10W						
	. = . 0 0 10 11			-,0	.,						

		5	5					5	<b>D</b>	
Ī	Ref. No.	Part No.	<u>Description</u>			Remark	Ref. No.	Part No.	Description	Remark
	C503 C504	1-126-967-11 1-164-227-11	ELECT	47uF 0.022uF	20% 10%	50V 25V	D401	6-501-817-01	DIODE MA2J1110GLS0	
	C504	1-104-227-11	CERAMIC CHIP ELECT	0.022ur 220uF	20%	25V 16V	D501	6-501-817-01	DIODE MA2J1110GLS0	
	C506	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V	D502	6-501-817-01	DIODE MA2J1110GLS0	
	C507	1-126-963-11	ELECT	4.7uF	20%	50V	D503	6-501-817-01	DIODE MA2J1110GLS0	
			E. E. E.	400 =	000/	4017	D600	6-501-752-01	DIODE MAZ8082GMLS0	
	C600	1-126-933-11 1-126-933-11	ELECT ELECT	100uF 100uF	20%	16V	D601	6-501-752-01	DIODE MAZ8082GMLS0	
	C601 C603	1-120-933-11	CERAMIC CHIP	0.1uF	20% 10%	16V 25V	D740	6-501-817-01	DIODE MA2J1110GLS0	
	C604	1-126-947-11	ELECT	47uF	20%	35V	D741	6-501-817-01	DIODE MA2J1110GLS0	
	C605	1-100-566-91	CERAMIC CHIP	0.1uF	10%	25V	D801	8-719-053-18	DIODE 1SR154-400TE-25	
					000/	0.51./	D802	8-719-053-18	DIODE 1SR154-400TE-25	
	C606 C650	1-126-947-11 1-126-934-11	ELECT ELECT	47uF 220uF	20% 20%	35V 16V	D803	8-719-053-18	DIODE 1SR154-400TE-25	
	C651	1-137-980-91	CERAMIC CHIP	0.47uF	10%	50V	D804	8-719-053-18	DIODE 1SR154-400TE-25	
	C701	1-126-964-11	ELECT	10uF	20%	50V	D810	6-501-817-01	DIODE MA2J1110GLS0	
	C702	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	D811	6-501-817-01	DIODE MA2J1110GLS0	
	0700	4 407 700 44	OFDAMIO	400DE	F0/	E001/	D821	6-500-360-01	DIODE D10XB20	
	C703 C704	1-107-792-11 1-162-927-11	CERAMIC CHIP	100PF 100PF	5% 5%	500V 1kV	D901	6-501-817-01	DIODE MA2J1110GLS0	
	C705	1-116-177-21	CERAMIC	3PF	0.25PF	1kV			< FUSE HOLDER >	
	C706	1-126-923-91	ELECT	220uF	20%	10V				
	C707	1-126-947-11	ELECT	47uF	20%	35V	FH901	1-533-293-11	FUSE HOLDER 0A	0V
	0700	4 444 000 04	OFDAMIO	47DE	F0/	40001/	FH902	1-533-293-11	FUSE HOLDER 0A	0V
	C708 C709	1-114-989-81 1-114-989-81	CERAMIC CERAMIC	47PF 47PF	5% 5%	1000V 1000V	FH903	1-533-293-11	FUSE HOLDER 0A	0V (E51, EA)
	C714	1-162-960-11	CERAMIC CHIP	220PF	10%	50V	FH904	1-533-293-11	FUSE HOLDER 0A	0V
	C715	1-136-157-00	FILM	0.022uF	5%	50V				(E51, EA)
	C751	1-126-964-11	ELECT	10uF	20%	50V	FH905	1-533-293-11	FUSE HOLDER 0A	0V
	0750	4 400 007 44	OFDAMIO OLUB	400DE	E0/	E01/				(E51, EA)
	C752 C753	1-162-927-11 1-107-792-11	CERAMIC CHIP CERAMIC	100PF 100PF	5% 5%	50V 1kV	FH906	1-533-293-11	FUSE HOLDER 0A	0V
	C754	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	111300	1-300-230-11	TOOL HOLDER OA	(E51, EA)
	C755	1-116-177-21	CERAMIC	3PF	0.25PF	1kV			< IC >	( - , , ,
	C756	1-126-923-91	ELECT	220uF	20%	10V				
	C757	1-126-947-11	ELECT	47uF	20%	35V	IC202 IC203	8-759-710-97 8-759-710-97	IC NJM4565M-D IC NJM4565M-D	
	C757	1-120-947-11	CERAMIC	47uF 47PF	5%	1000V	IC203	6-713-895-01	IC STK350-630-E	
	C759	1-114-989-81	CERAMIC	47PF	5%	1000V	IC501	6-708-609-01	IC uPC1237C-A	
	C764	1-162-960-11	CERAMIC CHIP	220PF	10%	50V	IC650	6-713-032-01	IC KIA7809API-U/PF	
	C765	1-136-157-00	FILM	0.022uF	5%	50V			. 14.017	
	C801	1-104-329-11	CERAMIC CHIP	0.1uF	10%	50V			< JACK >	
	C802	1-104-329-11	CERAMIC CHIP	0.1uF	10%	50V	J201	1-774-785-11	JACK, PIN 1P (SUBWOOFER AUDIC	IN)
	C803	1-126-942-61	ELECT	1000uF	20%	25V	J901	1-820-056-21	SMALL TYPE JACK (3.5MM)	,
	C804	1-104-666-11	ELECT	220uF	20%	25V			(SYSTEM	CONTROL IN)
	C821	1-130-777-00	MYLAR	0.1uF	5%	100V			< COIL >	
	C822	1-130-777-00	MYLAR	0.1uF	5%	100V			COIL	
	C823	1-116-301-11	ELECT	4700uF	20%	71V	L701	1-420-872-52	COIL, AIR-CORE	
				4700 5		EA, AR,TH)	L751	1-420-872-52	COIL, AIR-CORE	
	C823 C824	1-116-372-11 1-116-301-11	ELECT ELECT	4700uF 4700uF	20% 20%	80V (SAF) 71V			< TRANSISTOR >	
	C024	1-110-301-11	ELECT	4700ur		EA, AR,TH)			< TRANSISTOR >	
	C824	1-116-372-11	ELECT	4700uF	20%	80V (SAF)	Q501	8-729-216-31	TRANSISTOR 2SA1163-G	
							Q601	8-729-140-93	TRANSISTOR 2SB733-34	
*	C829	1-126-925-91	ELECT	470uF	20%	10V	Q602	8-729-140-98	TRANSISTOR 2SD773-34	
*	CNP650 CNP651	1-564-506-11 1-564-510-11	PLUG, CONNECT				Q701 Q702	8-729-216-31 8-729-922-39	TRANSISTOR 2SA1163-G TRANSISTOR 2SD2144S-V	
	CNP801	1-785-104-11	PIN, CONNECTO		PITCH) 6F	)	Q102	0-125-522-55	TRANSISTOR ZODZ 1440-V	
	CNP901	1-564-321-00	PIN, CONNECTO	*	,		Q704	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
	ONIDOGO	4 505 700 44	DIN CONNECTO	D (0.00			Q751	8-729-216-31	TRANSISTOR 2SA1163-G	
4	CNP902	1-565-792-11	PIN, CONNECTO	R (3.96mm )	,	, SAF, AUS)	Q752 Q754	8-729-922-39 8-729-620-07	TRANSISTOR 2SD2144S-V TRANSISTOR 2SC3052EF-T1-LEF	
	CNP903	1-568-106-11	PIN, CONNECTO	R (3.96mm l			Q810	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
				,	, "	,,,				
			< DIODE>			Q811	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF		
	D301	6 501 917 01	DIODE MASIAA	1001 00			Q901	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
	D301 D302	6-501-817-01 6-501-817-01	DIODE MA2J11				Q902	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
	D351	6-501-817-01	DIODE MA2J11							
	D352	6-501-817-01	DIODE MA2J11	10GLS0						

# Ver. 1.2 MAIN RIGHT LED

Ref. No.	Part No.	Description < RESISTOR>			Remark	<u>Ref. No.</u>	Part No. 1-249-405-11	Description CARBON	100	5%	Remark 1/4W
		\ NLSISTOR>				<u> </u>	1-243-403-11	CARBON	100	J /0	1/4 V V
R200	1-216-821-11	METAL CHIP	1K	5%	1/10W	⚠ R761	1-249-393-11	CARBON	10 20MDONE	5%	1/4W
R201 R202	1-216-839-11 1-216-829-11	METAL CHIP METAL CHIP	33K 4.7K	5% 5%	1/10W 1/10W	R763 R764	1-234-182-11 1-216-830-11	ENCAPSULATED METAL CHIP	5.6K	5%	1/10W
R203	1-216-841-11	METAL CHIP	47K	5%	1/10W	R765	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R204	1-216-821-11	METAL CHIP	1K	5%	1/10W	⚠ R767	1-249-389-11	CARBON	4.7	5%	1/4W
R205	1-216-832-11	METAL CHIP	8.2K	5%	1/10W	R810	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R206	1-216-841-11	METAL CHIP	47K	5%	1/10W	R811	1-216-835-11	METAL CHIP	15K	5%	1/10W
R207	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R812	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R208	1-216-833-11	METAL CHIP	10K	5%	1/10W	R813	1-216-835-11	METAL CHIP	15K	5%	1/10W
R210	1-216-845-11	METAL CHIP	100K	5%	1/10W	R901	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R211	1-216-845-11	METAL CHIP	100K	5%	1/10W	⚠ R902	1-249-381-11	CARBON	1	5%	1/4W
R212	1-216-832-11	METAL CHIP	8.2K	5%	1/10W	R903	1-216-838-11	METAL CHIP	27K	5%	1/10W
R213 R300	1-216-832-11	METAL CHIP	8.2K	5%	1/10W 1/10W	R904 R905	1-216-845-11 1-216-846-11	METAL CHIP	100K	5%	1/10W
R301	1-216-821-11 1-216-821-11	METAL CHIP METAL CHIP	1K 1K	5% 5%	1/10W	R905 R906	1-216-646-11	METAL CHIP METAL CHIP	120K 22K	5% 5%	1/10W 1/10W
R302 R304	1-216-827-11 1-216-841-11	METAL CHIP METAL CHIP	3.3K 47K	5% 5%	1/10W 1/10W	R907	1-216-834-11	METAL CHIP	12K	5%	1/10W
Æ R320	1-249-381-11	CARBON	1	5%	1/10VV 1/4W			< FUSE >			
⚠ R350	1-249-381-11	CARBON	1	5%	1/4W			. 552			
R351	1-216-821-11	METAL CHIP	1K	5%	1/10W	RF801	1-523-082-11	FUSE	1A		250V
<b> ∆</b> R401	1-249-381-11	CARBON	1	5%	1/4W	RF802	1-523-082-11	FUSE	1A		250V
R501	1-216-837-11	METAL CHIP	22K	5%	1/10W			< RELAY >			
R502	1-216-833-11	METAL CHIP	10K	5%	1/10W						
R503	1-216-839-11	METAL CHIP	33K	5%	1/10W	RY401	1-755-170-11	RELAY (12V)			
R504	1-216-843-11	METAL CHIP	68K	5%	1/10W	RY901	1-755-541-11	RELAY			
R505	1-216-835-11	METAL CHIP	15K	5%	1/10W			< SWITCH >			
R506	1-216-843-11	METAL CHIP	68K	5%	1/10W	0004	4 700 055 04	OF LEGTOR VOL	T4.0F		(FF4 FA)
R507 R508	1-216-833-11 1-216-845-11	METAL CHIP METAL CHIP	10K 100K	5% 5%	1/10W 1/10W	S901	1-786-055-31	SELECTOR, VOL	IAGE		(E51, EA)
R518	1-216-846-11	METAL CHIP	120K	5%	1/10W			< TERMINAL >			
D.500	4 040 045 44	METAL OLUB	40017	<b>5</b> 0/	4/40/4/	TD 404	4 004 705 44	TERMINAL ROAS	D (ODE ALC	-00 0110	WOOFFD)
R528 R600	1-216-845-11 1-216-825-11	METAL CHIP METAL CHIP	100K 2.2K	5% 5%	1/10W 1/10W	TB401 ******	1-694-785-11	TERMINAL BOAF			
R601	1-216-825-11	METAL CHIP	2.2K	5%	1/10W						
R640	1-216-837-11	METAL CHIP	22K	5%	1/10W			RIGHT LED BOA			
R641	1-216-845-11	METAL CHIP	100K	5%	1/10W			******	***		
R680	1-216-837-11	METAL CHIP	22K	5%	1/10W			< CAPACITOR >			
R681	1-216-845-11	METAL CHIP	100K	5%	1/10W						
R701	1-216-821-11	METAL CHIP	1K	5%	1/10W	C101	1-119-772-11	ELECT	47uF	20%	35V
R702 R703	1-216-843-11 1-216-825-11	METAL CHIP METAL CHIP	68K 2.2K	5% 5%	1/10W 1/10W	C102	1-119-774-11	ELECT	100uF	20%	16V
11700	1 2 10 020 11	WE IT IE OF III	2.21	070	1/1011			< DIODE >			
R704	1-216-843-11	METAL CHIP	68K	5%	1/10W	D404	0.504.047.04	DIODE MANIA	1001.00		
R706 R707	1-216-825-11 1-216-844-11	METAL CHIP METAL CHIP	2.2K 82K	5% 5%	1/10W 1/10W	D101 D104	6-501-817-01 6-501-817-01	DIODE MA2J11 DIODE MA2J11			
R708	1-216-818-11	METAL CHIP	560	5%	1/10W	D104	6-502-781-01	DI SELT5E20C-			
<b>⚠</b> R709	1-249-405-11	CARBON	100	5%	1/4W	D106	6-501-817-01	DIODE MA2J11	10GLS0		
<u></u> <b>⊼</b> R710	1-249-405-11	CARBON	100	5%	1/4W	D107	6-501-817-01	DIODE MA2J11	10GLS0		
<u></u> R710 <u></u> R711	1-249-393-11	CARBON	100	5%	1/4W	D108	6-501-817-01	DIODE MA2J11	10GLS0		
<b>⚠</b> R713	1-234-182-11	ENCAPSULATE	COMPONE			D109	6-502-781-01	DI SELT5E20C-	S TP15		
R714	1-216-830-11	METAL CHIP	5.6K	5%	1/10W	D110	6-501-817-01	DIODE MA2J11			
R715	1-218-867-11	METAL CHIP	6.8K	5%	1/10W	D111 D113	6-501-817-01 6-502-781-01	DIODE MA2J11 DI SELT5E20C-			
<b>⚠</b> R717	1-249-389-11	CARBON	4.7	5%	1/4W						
R751	1-216-821-11	METAL CHIP	1K	5%	1/10W	D114	6-501-817-01	DIODE MA2J11			
R752 R753	1-216-843-11 1-216-825-11	METAL CHIP METAL CHIP	68K 2.2K	5% 5%	1/10W 1/10W	D115 D116	6-501-817-01 6-501-817-01	DIODE MA2J11 DIODE MA2J11			
R754	1-216-843-11	METAL CHIP	68K	5%	1/10W	D110	6-502-781-01	DI SELT5E20C-			
						D118	6-501-817-01	DIODE MA2J11			
R756 R757	1-216-825-11 1-216-844-11	METAL CHIP METAL CHIP	2.2K 82K	5% 5%	1/10W 1/10W	D119	6-501-817-01	DIODE MA2J11	10GI S0		
R758	1-216-818-11	METAL CHIP	560	5%	1/10W	D119 D121	6-502-782-01	DI SELU5920A-			
<b>⚠</b> R759	1-249-405-11	CARBON	100	5%	1/4W	D122	6-502-782-01	DI SELU5920A-			

RIGHT LED VOL CONTROL

Dof No	Port No	Description		Domark	Dof No	Part No.	Description	Domark
Ref. No. D1112	Part No. 6-501-817-01	Description  DIODE MA2J1110GLS	)	Remark	<u>Ref. No.</u> <u>∧</u> 103	1-833-566-21	Description POWER-SUPPLY CORD	Remark (AUS)
51112	0 001 011 01		,		<u>↑</u> 103	1-834-270-11	CORD, POWER	(CND)
Q101 Q102 Q103 Q104	8-729-216-31 8-729-620-07 8-729-620-07 8-729-620-07	<pre><transistor> TRANSISTOR 2SA116 TRANSISTOR 2SC305 TRANSISTOR 2SC305 TRANSISTOR 2SC305</transistor></pre>	2EF-T1-LEF 2EF-T1-LEF 2EF-T1-LEF		<ul> <li>▲ 103</li> <li>▲ 104</li> <li>▲ 105</li> <li>▲ F901</li> <li>▲ F902</li> </ul>	1-834-288-21 1-569-008-33 1-770-019-71 1-532-464-33 1-532-464-33	CORD, POWER ADAPTOR, CONVERSION 2P ADAPTOR, CONVERSION PLUG 3P FUSE (T2.5AL/250V) FUSE (T2.5AL/250V)	(TH) (E51) (EA) (E51, EA)
Q105	8-729-620-07	TRANSISTOR 2SC305	2EF-T1-LEF		<u></u>	1-532-504-33	FUSE (T4AL/250V)	(E51, EA)
Q106 Q107	8-729-620-07 8-729-620-07	TRANSISTOR 2SC305 TRANSISTOR 2SC305 < RESISTOR >			Q703 Q705 Q753 Q755	6-702-390-01 6-702-391-01 6-702-390-01 6-702-391-01	TRANSISTOR MN2488-OPY-MK TRANSISTOR MP1620-OPY-MK TRANSISTOR MN2488-OPY-MK TRANSISTOR MP1620-OPY-MK	
D404	4 040 000 44		F0/	4/4014/				(045 4110)
R101 R102 R103 R104 R105	1-216-833-11 1-216-833-11 1-216-839-11 1-216-833-11 1-216-819-11	METAL CHIP 10K METAL CHIP 10K METAL CHIP 33K METAL CHIP 10K METAL CHIP 680	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	⚠ T901	1-445-698-12 1-445-713-12 1-445-731-11 1-445-751-11 ********	POWER TRANSFORMER TRANSFORMER, POWER POWER TRANSFORMER TRANSFORMER, POWER ************************************	(SAF, AUS) (E51) (CND) (EA)
R106	1-216-817-11	METAL CHIP 470	5%	1/10W				
R107 R108	1-216-817-11 1-216-833-11	METAL CHIP 470 METAL CHIP 10K	5% 5%	1/10W 1/10W				
R109 R110	1-216-817-11 1-216-817-11	METAL CHIP 470 METAL CHIP 470	5% 5%	1/10W 1/10W				
R111	1-216-837-11	METAL CHIP 22K	5%	1/10W				
R112	1-216-817-11	METAL CHIP 470	5%	1/10W				
R113 R114	1-216-817-11 1-216-839-11	METAL CHIP 470 METAL CHIP 33K	5% 5%	1/10W 1/10W				
R115	1-216-817-11	METAL CHIP 470	5%	1/10W				
R116	1-216-817-11	METAL CHIP 470	5%	1/10W				
R117 R118	1-216-843-11 1-216-809-11	METAL CHIP 68K METAL CHIP 100	5% 5%	1/10W 1/10W				
R119	1-216-815-11	METAL CHIP 330	5%	1/10W				
R120	1-216-839-11	METAL CHIP 33K	5%	1/10W				
R121 R122	1-216-809-11 1-216-815-11	METAL CHIP 100 METAL CHIP 330	5% 5%	1/10W 1/10W				
R123	1-216-864-11	SHORT CHIP 0	370	1/1000				
R124 R125	1-216-864-11 1-216-864-11	SHORT CHIP 0 SHORT CHIP 0						
K125	1-210-004-11	SHORT CHIP U						
		< SWITCH >						
S101 ******	1-554-118-00 *******	SWITCH, PUSH (1 KEY)						
		VOL CONTROL BOARD						
		< CONNECTOR>						
CNP104	1-691-765-11	PLUG (MICRO CONNEC	CTOR) 3P					
		<resistor></resistor>						
R131	1-216-845-11	METAL CHIP 100K	5%	1/10W				
		< ROTARY ENCODER :	>					
RV001 ******	1-227-861-11 *******	POTENTIOMETER (SUI						
		MISCELLANEOUS ********						
101 103 103	1-763-738-11 1-777-071-83 1-829-387-11	DC FAN CORD, POWER CORD, POWER	(EXC	CEPT AR, TH) (AR)				

### TA-KMSW500

### <u>MEMO</u>

### <u>MEMO</u>

#### **REVISION HISTORY**

Checking the version allows you to jump to the revised page. Also, clicking the version at the top of the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision			
1.0	2009.04	New			
1.1	2009.05	Additional of HT-DDW8500 model.			
1.2	2009.07	Additional of Canadian, Thai and Saudi Arabia models.			
1.3	2009.11	Change P/N and description for C708, C709, C758, C759 in MAIN board.			